DOCKET NO.: MSFT-0573/160076.01 **PATENT**

Application No.: 09/900,123

Office Action Dated: January 25, 2011

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A method comprising:

implementing in a class <u>a first explicit interface having</u> a first explicit interface member by explicitly specifying the relationship between the class and the first explicit interface member, the first explicit interface member being excluded from a public interface of the class;

implementing in the class <u>a second explicit interface having</u> a second explicit interface member, the second explicit interface member having the same signature as the first explicit interface member, the signature comprising a member name, a number of one or more parameters, and a type for each of the number of one or more parameters;

after implementing in the class the first and second explicit interfaces, compiling the class into computer-executable instructions along with a call in the class to the first explicit interface member and a call in the class to the second explicit interface member, the call comprising an identifier of an explicit interface, and a corresponding identifier of an explicit interface member;

in response to processing an instruction of the instructions corresponding to the call to the first explicit interface member, executing the call with the first explicit interface member to produce a first result;

storing the first result in a computer readable storage medium;

in response to processing a second instruction of the instructions corresponding to the call to the second explicit interface member, executing the call with the second explicit interface member to produce a second result; and

storing the second result in the computer readable storage medium.

storing said class in a form that includes the implemented first explicit interface member and the implemented second explicit interface member in a computer readable storage medium.

2. (Previously presented) The method according to claim 1, wherein said specifying of the relationship between the class and the first explicit interface member includes: specifying a qualified name of the class.

Application No.: 09/900,123

Office Action Dated: January 25, 2011

3. (Previously presented) The method according to claim 2, wherein said specifying of the qualified name includes:

PATENT

specifying an interface name and a name of the first explicit interface member.

4-5. (Cancelled)

6. (Previously presented) The method according to claim 1, wherein implementing in the class the first explicit interface member comprises:

implementing in the class an internal interface not accessible to a consumer of said class.

- 7. (Cancelled)
- 8. (Previously presented) The method according to claim 1, wherein the second explicit interface member has the same return type as the first explicit interface member.
- 9. (Previously presented) The method according to claim 1, wherein the second explicit interface members is included in a public interface of the class.
- 10. (Previously presented) A method according to claim 1, wherein the first explicit interface member comprises a first version of a generic interface, and the second explicit interface member comprises a second version of the generic interface.
- 11. (Previously presented) The method according to claim 1, wherein the class is programmed according to an object-oriented programming language.
- 12. (Previously presented) The method according to claim 1, wherein an implementation of an explicit interface member is a method, property, event, or indexer declaration that references a fully qualified interface member name.

Application No.: 09/900,123

Office Action Dated: January 25, 2011

13. (Previously presented) The method according to claim 1, wherein the class names an interface in a base class list of the class that contains a member whose fully qualified name, type, and parameter types exactly match those of the implementation of the first explicit interface

PATENT

14.-16. (Cancelled)

17. (Previously presented) The method according to claim 1, wherein it is not possible

to override the first explicit interface member wherein the first explicit interface member calls

another virtual method, and wherein a class derived from the class overrides the first explicit

interface member.

member.

18. (Previously presented) The method according to claim 1, wherein the class re-

implements an interface of the first explicit interface member by including the interface in the

base class list of the class.

19-22. (Cancelled)

23. (Currently amended) A computer readable storage medium including processor-

executable instructions, the processor-executable instructions generated from a plurality of

modules written in an object-oriented programming language, the instructions when executed on

the processor, cause the processor to perform operations comprising:

implementing in a class <u>a first explicit interface having</u> a first explicit interface member

by explicitly specifying the relationship between the class and the first explicit interface member,

the first explicit interface member being excluded from a public interface of the class;

implementing in the class a second explicit interface having a second explicit interface

member, the second explicit interface member having the same signature as the first explicit

Application No.: 09/900,123

Office Action Dated: January 25, 2011

interface member, the signature comprising a member name, a number of one or more parameters, and a type for each of the number of one or more parameters;

after implementing in the class the first and second explicit interfaces, compiling the class into computer-executable instructions along with a call in the class to the first explicit interface member and a call in the class to the second explicit interface member, the call comprising an identifier of an explicit interface, and a corresponding identifier of an explicit interface member;

in response to processing a first instruction of the instructions corresponding to the call to the first explicit interface member, executing the call with the first explicit interface member to produce a first result;

storing the first result in a computer readable storage medium;

in response to processing a second instruction of the instructions corresponding to the call to the second explicit interface member, executing the call with the second explicit interface member to produce a second result; and

storing the second result in the computer readable storage medium.

storing said class in a form that includes the implemented first explicit interface member and the implemented second explicit interface member in a memory.

24. (Previously presented) The computer readable storage medium according to claim 23, wherein said specifying of the relationship between the class and the first explicit interface member includes:

specifying a qualified name of the class.

25. (Previously presented) The computer readable storage medium according to claim 24, wherein said specifying of the qualified name includes:

specifying at least one interface name and a name of the first explicit interface member.

26.-27. (Cancelled)

Application No.: 09/900,123

Office Action Dated: January 25, 2011

28. (Previously presented) The computer readable storage medium according to claim

23, wherein implementing in the class the first explicit interface member comprises:

implementing in the class an internal interface not accessible to a consumer of said class.

PATENT

29. (Cancelled)

30. (Previously presented) The computer readable storage medium according to claim

23, wherein the second explicit interface members is included in a public interface of the class.

31. (Previously presented) The computer readable storage medium according to claim

23, wherein the second explicit interface members is included in a public interface of the class.

32. (Previously presented) The computer readable storage medium according to claim

23, wherein the first explicit interface member comprises a first version of a generic interface,

and the second explicit interface member comprises a second version of the generic interface.

33. (Previously presented) The computer readable storage medium according to claim

23, wherein the object-oriented programming language is C.

34. (Previously presented) The computer readable storage medium according to claim

23, wherein an implementation of an explicit interface member is a method, property, event, or

indexer declaration that references a fully qualified interface member name.

35. (Previously presented) The computer readable storage medium according to claim

23, wherein said the class names an interface in the base class list of the class that contains a

member whose fully qualified name, type, and parameter types exactly match those of the

implementation of the explicit interface member.

36.-38. (Cancelled)

Page 6 of 16

DOCKET NO.: MSFT-0573/160076.01 **PATENT**

Application No.: 09/900,123

Office Action Dated: January 25, 2011

39. (Previously presented) The computer readable storage medium according to claim 23, wherein it is not possible to override the first explicit interface member wherein the first explicit interface member calls another virtual method, and wherein a class derived from the class overrides the first explicit interface member.

40. (Previously presented) The computer readable storage medium according to claim 23, wherein the class re-implements an interface of the first explicit interface member by including the interface in the base class list of the class.

41.-60. (Cancelled)

61. (Currently amended) A method system for of generating an object, comprising: a processor; and

a memory communicatively coupled to the processor when the system is operational, the memory bearing processor-executable instructions that, when executed on the processor, cause:

implementing in a class a first explicit interface having a first explicit interface member by explicitly specifying the relationship between the class and the first explicit interface member, the first explicit interface member being excluded from a public interface of the class;

implementing in the class a second explicit interface having a second explicit interface member, the second explicit interface member having the same signature as the first explicit interface member, the signature comprising a member name, a number of one or more parameters, and a type for each of the number of one or more parameters;

after implementing in the class the first and second explicit interfaces, compiling the class into computer-executable instructions along with a call in the class to the first explicit interface member and a call in the class to the second explicit interface member, the call comprising an identifier of an explicit interface, and a corresponding identifier of an explicit interface member;

Application No.: 09/900,123

Office Action Dated: January 25, 2011

in response to processing a first instruction of the instructions corresponding to the call to the first explicit interface member, executing the call with the first explicit interface member to produce a first result;

storing the first result in a computer readable storage medium;

in response to processing a second instruction of the instructions corresponding to the call to the second explicit interface member, executing the call with the second explicit interface member to produce a second result; and

storing the second result in the computer readable storage medium.

receiving, by a compiler, source code identifying a class that implements an interface, a first member, and a second member, the class specifying a relationship between the first and second members and the name of the interface;

implementing, by the compiler, the first member as a first explicit interface member in the class, and the second member as a second explicit interface member in the class, in response to detecting the relationship between the first and second members and the name of the interface, wherein the first explicit interface member is excluded from a public interface of the class and the first explicit interface member is accessible from the interface, and wherein the first and second explicit interface members have the same signature; and

initializing an instance of said class in a computer readable storage medium.

62. (Currently Amended) The method system of claim 61, wherein said specifying a relationship between the first member and the name of the interface includes:

specifying a qualified name of the class.

63. (Currently Amended) The method system of claim 62, wherein said specifying a qualified name includes:

specifying an interface name and a name of the first explicit interface member.

64.-65.(Cancelled)

Application No.: 09/900,123

Office Action Dated: January 25, 2011

66. (Currently Amended) The method system of claim 61, wherein said class implements

PATENT

implementing in the class the first explicit interface member comprises:

<u>implementing in the class</u> an internal interface that is not accessible to a consumer of said

software component class.

67. (Cancelled)

68. (Currently Amended) The method system of claim 61, wherein the second explicit

interface member has the same return type as the first explicit interface member.

69. (Currently Amended) The method system of claim 61, wherein the second explicit

interface members is included in a public interface of the class.

70. (Currently Amended) The method system of claim 61, wherein the first explicit

interface member comprises a first version of a generic interface, and the second explicit

interface member comprises a second version of the generic interface.

71. (Currently Amended) The method system of claim 61, wherein the class is

implemented in an object-oriented programming language.

72. (Currently Amended) The method system of claim 61, wherein said implemented first

explicit interface member is a member selected from a group of members consisting of a method,

a property, an event, and an indexer declaration that references a fully qualified interface

member name.

73. (Currently Amended) The method system of claim 61, wherein said class names an

interface in a base class list of the class that contains a member whose fully qualified name, type,

and parameter types exactly match those of the implemented first explicit interface member.

Page 9 of 16

DOCKET NO.: MSFT-0573/160076.01 **PATENT**

Application No.: 09/900,123

Office Action Dated: January 25, 2011

74.-76. (Cancelled)

77. (Currently Amended) The method system of claim 61, wherein it is not possible to

override the first explicit interface member wherein the first explicit interface member calls

another virtual method, and wherein a class derived from the class overrides the first explicit

interface member.

78. (Currently Amended) The method system of claim 61, wherein said class re-

implements an interface of the first explicit interface member by including the interface in the

base class list of the class.

79. (Cancelled)